Freeform Search

West Search

Database:

Term:

Display:
Documents in Display Format: Starting with
Number

Generate:
Hit List Hit Count Side by Side Image

Search History

DATE: Tuesday, August 12, 2003 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ			
L9	(l4 or l6) same (avidin or streptavidin)	9	L9
L8	(me near dtpa) or (citc near dtpa) or (cyclohexyl near dtpa)	24	L8
L7	4529587.pn.		

2

L7

L6

nor biotin or homo biotin

7

L6

L5

L4 not l2

1

L5

L4

norbiotin or homobiotin

12

L4

L3

L2 not l1

2

L3

L2

biotin same (norbiotin or homobiotin)

11

L2

L1

biotin near (norbiotin or homobiotin)

9

L1

END OF SEARCH HISTORY

Connecting via Winsock to STN

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PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	Feb 24	PCTGEN now available on STN
NEWS 4	Feb 24	TEMA now available on STN
NEWS 5	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS 6	Feb 26	PCTFULL now contains images
NEWS 7	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 8	Mar 24	PATDPAFULL now available on STN
NEWS 9	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS 10	Apr 11	Display formats in DGENE enhanced
NEWS 11	Apr 14	MEDLINE Reload
NEWS 12	Apr 17	Polymer searching in REGISTRY enhanced
NEWS 13	Jun 13	Indexing from 1947 to 1956 added to records in CA/CAPLUS
NEWS 14	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS 15	Apr 28	RDISCLOSURE now available on STN
NEWS 16	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
NEWS 17	May 15	MEDLINE file segment of TOXCENTER reloaded
NEWS 18	May 15	Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS 19	May 19	Simultaneous left and right truncation added to WSCA
NEWS 20	May 19	RAPRA enhanced with new search field, simultaneous left and right truncation
NEWS 21	Jun 06	Simultaneous left and right truncation added to CBNB
NEWS 22	Jun 06	PASCAL enhanced with additional data
NEWS 23	Jun 20	2003 edition of the FSTA Thesaurus is now available
NEWS 24	Jun 25	HSDB has been reloaded
NEWS 25	Jul 16	Data from 1960-1976 added to RDISCLOSURE
NEWS 26	Jul 21	Identification of STN records implemented
NEWS 27	Jul 21	Polymer class term count added to REGISTRY
NEWS 28	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available
NEWS 29	AUG 05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003

NEWS EXPRESS	April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
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NEWS LOGIN	Welcome Banner and News Items
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FILE 'HOME' ENTERED AT 12:26:00 ON 12 AUG 2003

=> fil reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 12:26:14 ON 12 AUG 2003
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 AUG 2003 HIGHEST RN 565156-77-6
DICTIONARY FILE UPDATES: 11 AUG 2003 HIGHEST RN 565156-77-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> e norbiotin/cn

E1	1	NORBINALTRORPHIMINE/CN
E2	1	NORBIOGEST/CN
E3	1 -->	NORBIOTIN/CN
E4	1	NORBIOTIN HYDRAZIDE/CN
E5	1	NORBIOTIN METHYL ESTER/CN
E6	1	NORBIOTIN SULFONE/CN
E7	1	NORBIOTIN SULFONE METHYL ESTER/CN
E8	1	NORBIOTIN SULFOXIDE/CN
E9	1	NORBIOTIN, 3A,4,6,6A-TETRADEHYDRO-/CN
E10	1	NORBIOTINAMINE/CN
E11	1	NORBIPHEN/CN
E12	1	NORBISABOLIDE/CN

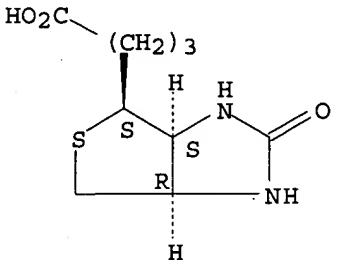
=> s e3
L1 1 NORBIOTIN/CN

=> d

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
RN 669-72-7 REGISTRY
CN 1H-Thieno[3,4-d]imidazole-4-butanoic acid, hexahydro-2-oxo-, (3aS,4S,6aR)-(9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Thieno[3,4-d]imidazole-4-butanoic acid, hexahydro-2-oxo-, [3aS-(3a.alpha.,4.beta.,6a.alpha.)]-

CN 1H-Thieno[3,4-d]imidazole-4-butyric acid, hexahydro-2-oxo- (8CI)
OTHER NAMES:
CN **Norbiotin**
FS STEREOSEARCH
MF C9 H14 N2 O3 S
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, DDFU, DRUGU, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



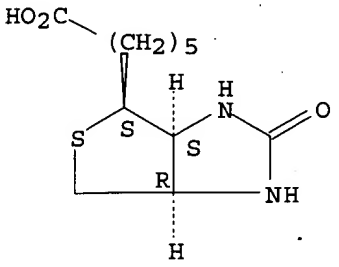
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

14 REFERENCES IN FILE CA (1947 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
14 REFERENCES IN FILE CAPLUS (1947 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
=> e homobiotin/cn
E1            1     HOMOBENZVALENE/CN
E2            1     HOMOBENZYLPENICILLIN/CN
E3            1 --> HOMOBIOTIN/CN
E4            1     HOMOBIOTIN HYDRAZIDE/CN
E5            1     HOMOBIOTIN METHYL ESTER/CN
E6            1     HOMOBIOTIN SULFONE/CN
E7            1     HOMOBIOTIN SULFONE METHYL ESTER/CN
E8            1     HOMOBIOTIN SULFOXIDE/CN
E9            1     HOMOBORNANE/CN
E10           1     HOMOBORNEOL/CN
E11           1     HOMOBOTCINOLIDE/CN
E12           1     HOMOBOX-CONTAINING PROTEIN PKNOX 11.11 (HUMAN FETAL BRAIN CL
                    ONE PBS-1729F10)/CN

=> s e3
L2            1 HOMOBIOTIN/CN

=> d

L2   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   1784-22-1  REGISTRY
CN   1H-Thieno[3,4-d]imidazole-4-hexanoic acid, hexahydro-2-oxo-, (3aS,4S,6aR)-
     (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   1H-Thieno[3,4-d]imidazole-4-hexanoic acid, hexahydro-2-oxo-, stereoisomer
     (8CI)
CN   1H-Thieno[3,4-d]imidazole-4-hexanoic acid, hexahydro-2-oxo-,
     [3aS-(3a.alpha.,4.beta.,6a.alpha.)]-
OTHER NAMES:
CN   (+)-Homobiotin
CN   Homobiotin
FS   STEREOSEARCH
```

MF C11 H18 N2 O3 S
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, DDFU, DRUGU,
    TOXCENTER, USPATFULL
      (*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

17 REFERENCES IN FILE CA (1947 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
17 REFERENCES IN FILE CAPLUS (1947 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> fil caplus uspatfull biosis embase medline

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	12.20	12.41

FILE 'CAPLUS' ENTERED AT 12:26:46 ON 12 AUG 2003
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=> d his

(FILE 'HOME' ENTERED AT 12:26:00 ON 12 AUG 2003)

FILE 'REGISTRY' ENTERED AT 12:26:14 ON 12 AUG 2003
E NORBIOTIN/CN
L1 1 S E3
E HOMOBIOTIN/CN
L2 1 S E3

FILE 'CAPLUS, USPATFULL, BIOSIS, EMBASE, MEDLINE' ENTERED AT 12:26:46 ON 12 AUG 2003

=> s biotin (s) (l1 or l2)
L3 11 BIOTIN (S) (L1 OR L2)

=> dup rem l3
PROCESSING COMPLETED FOR L3
L4 11 DUP REM L3 (0 DUPLICATES REMOVED)

=> d ibib abs

L4 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:658989 CAPLUS
DOCUMENT NUMBER: 138:35650
TITLE: Ligand exchange between proteins: exchange of biotin and biotin derivatives between avidin and streptavidin
AUTHOR(S): Pazy, Yael; Kulik, Tikva; Bayer, Edward A.; Wilchek, Meir; Livnah, Oded
CORPORATE SOURCE: Department of Biological Chemistry, The Institute of Life Sciences, The Wolfson Centre for Applied Structural Biology, The Hebrew University of Jerusalem, Jerusalem, 91904, Israel
SOURCE: Journal of Biological Chemistry (2002), 277(34), 30892-30900
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We have studied the structural elements that affect ligand exchange between the two high affinity biotin-binding proteins, egg white avidin and its bacterial analog, streptavidin. For this purpose, we have developed a simple assay based on the antipodal behavior of the two proteins toward hydrolysis of biotinyl p-nitrophenyl ester (BNP). The assay provided the exptl. basis for these studies. It was found that biotin migrates unidirectionally from streptavidin to avidin. Conversely, the biotin deriv., BNP, is transferred in the opposite direction, from avidin to streptavidin. A previous crystallog. study provided insight into a plausible explanation for these results. These data revealed that the non-hydrolyzable BNP analog, biotinyl p-nitroanilide, was almost completely sheltered in streptavidin as opposed to avidin in which the disordered conformation of a crit. loop resulted in the loss of several hydrogen bonds and concomitant exposure of the analog to the solvent. In order to det. the minimal modification of the biotin mol. required to cause the disordered loop conformation, the structures of avidin and streptavidin were detd. with norbiotin, homobiotin, and a common long-chain biotin deriv., biotinyl .epsilon.-aminocaproic acid. Six new crystal structures of the avidin and streptavidin complexes with the latter biotin analogs and derivs. were thus elucidated. It was found that extending the biotin side chain by a single CH2 group (i.e. homobiotin) is sufficient to result in this remarkable conformational change in the loop of avidin. These results bear significant biotechnol. importance, suggesting that complexes contg. biotinylated probes with streptavidin would be more stable than those with avidin. These findings should be heeded when developing new drugs based on lead compds. because it is difficult to predict the structural and conformational consequences on the resultant protein-ligand interactions.
REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 2 ibib abs

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:923565 CAPLUS
DOCUMENT NUMBER: 136:42919
TITLE: Biotin derivatives for an extracorporeal device
INVENTOR(S): Sandberg, Bengt; Wilbur, Scott; Nilsson, Rune
PATENT ASSIGNEE(S): Mitra Medical Technology AB, Swed.; University of

Washington
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001095857	A2	20011220	WO 2001-SE1374	20010618
WO 2001095857	A3	20020328		
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002159994	A1	20021031	US 2001-881213	20010615
AU 2001074761	A5	20011224	AU 2001-74761	20010618
EP 1289563	A2	20030312	EP 2001-941404	20010618
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001011726	A	20030527	BR 2001-11726	20010618
NO 2002005931	A	20030214	NO 2002-5931	20021211

PRIORITY APPLN. INFO.:
SE 2000-2287 A 20000616
US 2000-216625P P 20000707
WO 2001-SE1374 W 20010618

AB A method for the conditioning of an extracorporeal device is described, as well as a method for extracorporeal extn. of toxic material from mammalian body fluids in connection with diagnosis or treatment of a mammalian condition or disease. The methods comprise (i) a soln. contg. a reagent comprising biotin moieties, such as natural biotin or its derivs., and a toxin-binding moiety, (ii) linkers and a trifunctional crosslinking moiety, and (ii) an extracorporeal device comprising said reagent. For example, a dibiotin compd., 1-isothiocyanato-3,5-bis-(13'-biotinamidyl-4',7',10'-trioxatridecanamidyl)-aminoisophthalate was prepd. and conjugated with a toxin-binding mol., i.e., monoclonal antibody 53-6A2. A dibiotin-toxin-binding conjugate was used for conditioning of an avidin-agarose column suitable for removal of toxins from blood.

=> d 3 ibib abs

L4 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:433866 CAPLUS
DOCUMENT NUMBER: 133:248664
TITLE: Biotin Reagents for Antibody Pretargeting. 4. Selection of Biotin Conjugates for in Vivo Application Based on Their Dissociation Rate from Avidin and Streptavidin
AUTHOR(S): Wilbur, D. Scott; Chyan, Ming-Kuan; Pathare, Pradip M.; Hamlin, Donald K.; Frownfelter, Milah B.; Kegley, Brian B.
CORPORATE SOURCE: Department of Radiation Oncology, University of Washington, Seattle, WA, 98195, USA
SOURCE: Bioconjugate Chemistry (2000), 11(4), 569-583
CODEN: BCCHES; ISSN: 1043-1802
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal

LANGUAGE: English

AB An investigation was conducted to det. the affect of structural variation of biotin conjugates on their dissocn. rates from Av and SAv. This information was sought to help identify optimal biotin derivs. for in vivo applications. Fifteen biotin derivs. were conjugated with a cyanocobalamin (CN-Cbl) deriv. for evaluation of their "relative" dissocn. rates by size exclusion HPLC anal. Two biotin-CN-Cbl conjugates, one contg. unaltered biotin and the other contg. iminobiotin, were prepd. as ref. compds. for comparison purposes. The first structural variations studied involved modification of the biotinamide bond with a N-Me moiety (i.e., sarcosine conjugate), lengthening the valeric acid side chain by a methylene unit (i.e., homobiotin), and replacing the biotinamide bond with thiourea bonds in two conjugates. The rate of dissocn. of the biotin-CN-Cbl deriv. from Av and SAv was significantly increased for biotin derivs. contg. those structural features. Nine addnl. biotin conjugates were obtained by coupling amino acids or functional group protected amino acids to the biotin moiety. In the conjugates, the biotin moiety and biotinamide bond were not altered, but substituents of various sizes were introduced .alpha. to the biotinamide bond. The results obtained from HPLC analyses indicated that the rate of dissocn. from Av or SAv was not affected by small substituents .alpha. to the biotinamide (e.g., Me, hydroxymethyl, and carboxylate groups), but was significantly increased when larger functional groups were present. On the basis of the results obtained, it appears that biotin conjugates which retain an unmodified biotin moiety and have a linker mol. conjugated to it that has a small functional group (e.g., hydroxymethylene or carboxylate) .alpha. to the biotinamide bond are excellent candidates for in vivo applications. These structural features are obtained in the biotin amino acid conjugates: biotin-serine, biotin-aspartate, biotin-lysine, and biotin-cysteine. Importantly, these biotin derivs. can be readily conjugated with other mols. for specific in vivo applications. In our studies, these derivs. will be used in the design of new biotin conjugates to carry radionuclides for cancer therapy using the pretargeting approach.

REFERENCE COUNT: 79 THERE ARE 79 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 4 ibib abs

L4 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:642438 CAPLUS

DOCUMENT NUMBER: 129:274233

TITLE: Biotin determination by three different methods. Specificity and application to urine and plasma ultrafiltrates of patients with and without disorders in biotin metabolism

AUTHOR(S): Baur, Barbara; Suormala, Terttu; Bernoulli, Claudia; Baumgartner, E. Regula

CORPORATE SOURCE: Metabolic Unit, Children's Hospital, Univ. Basel, Basel, CH-4005, Switz.

SOURCE: International Journal for Vitamin and Nutrition Research (1998), 68(5), 300-308
CODEN: IJVNAP; ISSN: 0300-9831

PUBLISHER: Hogrefe & Huber Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A microbiol., an avidin-binding, and a streptavidin-binding method for biotin detn. were compared. All 3 methods detected biotin equally well but they exhibit different specificities for derivs. of biotin. The microbiol. assay has the highest specificity and is the method of choice for biotin detn. in biotinidase-deficient patients. The specificity of streptavidin-binding was not investigated so far. Application of the 3 methods to urine samples of patients with and without biotin therapy indicated that only 50% of biotin equiv. measured with the avidin method

correspond to authentic biotin as previously shown. The other 50% comprise mainly bisnorbiotin and biotin-d-sulfoxide. HPLC-sepn. of urine samples prior to assay confirmed this finding and revealed a bisnorbiotin oxidn. product and an unknown compd. as further biotin metabolites. The latter was measurable by all 3 methods and not detectable in plasma ultrafiltrate. This was the only metabolite which was able to restore deficient 3-methylcrotonyl-CoA carboxylase activity in biotin-deficient fibroblasts. The combination of the 3 methods together with HPLC-sepn. proved to be a valuable anal. tool for the identification of the main biotin metabolites in biol. fluids.

=> d 5 ibib abs

L4 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:436530 CAPLUS
DOCUMENT NUMBER: 113:36530
TITLE: Sodium-dependent biotin transport into brush-border membrane vesicles from rat kidney
AUTHOR(S): Baur, Barbara; Wick, Hugo; Baumgartner, E. Regula
CORPORATE SOURCE: Metab. Unit, Univ. Child. Hosp., Basel, CH-4058, Switz.
SOURCE: American Journal of Physiology (1990), 258(4, Pt. 2), F840-F847
CODEN: AJPHAP; ISSN: 0002-9513
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The mechanisms of biotin reabsorption in rat kidney cortex were investigated using isolated brush-order membrane vesicles. An inwardly directed Na+ gradient specifically stimulated a transient biotin overshoot. Biotin transport was not affected by a valinomycin-induced K+-diffusion potential, and biotin--Na+ stoichiometry was found to be 1:1. As a function of concn., the uptake showed satn. in the presence of a Na+ gradient with an apparent Km of 55 .mu.M and Vmax of 217 pmol .times. mg protein-1 .times. 25 s-1. Desthiobiotin, 250 .mu.M, norbiotin, bisnorbiotin, thioctic acid, valeric acid, probenecid, and nonanoic acid inhibited the transport of 30 .mu.M biotin, whereas other biotin derivs., as well as biocytin and org. acids found in the urine of biotinidase-deficient patients, did not. Preloading of the vesicles with biotin, desthiobiotin, and norbiotin, and thioctic acid in the presence of Na+ increased initial uptake of biotin from the incubation medium (trans-stimulation). The results indicate that biotin absorption in rat kidney fulfills the criteria for a specific carrier-mediated and electroneutral Na+-biotin- cotransport in a 1:1 ratio. The results are discussed in context with congenital biotinidase deficiency in humans.

=> d 5 kwic

L4 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN
IT 57-66-9, Probenecid 109-52-4, Pentanoic acid, biological studies
112-05-0, Nonanoic acid 533-48-2, Desthiobiotin **669-72-7**,
Norbiotin 1077-28-7, Thioctic acid 16968-98-2, Bisnorbiotin
RL: BIOL (Biological study)
(**biotin** and sodium cotransport by brush-border membrane of kidney cortex inhibition by)

=> d 6 ibib abs

L4 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1986:3747 CAPLUS
DOCUMENT NUMBER: 104:3747
TITLE: Biotin uptake by isolated rat liver hepatocytes

AUTHOR(S): Bowers-Komro, Delores M.; McCormick, Donald B.
CORPORATE SOURCE: Sch. Med., Emory Univ., Atlanta, GA, 30322, USA
SOURCE: Annals of the New York Academy of Sciences (1985), 447(Biotin), 350-8
CODEN: ANYAA9; ISSN: 0077-8923
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In a study using hepatocytes isolated from rat liver, biotin, an acid anion, appeared to be transported by a Na+-dependent process with an acid-anion carrier. The uptake process was followed by several metabolic functions, none of which appeared to predominate, as demonstrated by the absence of a definitive saturable process. The uptake process was temp. dependent, and general org. anions (bilirubin and cholic acid) were shown to be competitive.

=> d 6 kwic

L4 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN
IT 58-85-5D, analogs 81-25-4 533-48-2 576-19-2 608-16-2 635-65-4, biological studies **1784-22-1** 22342-46-7 53906-36-8
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(**biotin** transport by hepatocytes response to)

=> d 7 ibib abs kwic

L4 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1984:12447 CAPLUS
DOCUMENT NUMBER: 100:12447
TITLE: Skin treatment compositions containing biotin antagonists
INVENTOR(S): Green, Martin Richard
PATENT ASSIGNEE(S): Unilever PLC, UK
SOURCE: Brit. UK Pat. Appl., 18 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2114886	A1	19830901	GB 1983-4383	19830217
GB 2114886	B2	19860604		
US 4529587	A	19850716	US 1983-462859	19830201
AU 8311432	A1	19830825	AU 1983-11432	19830215
AU 548324	B2	19851205		
EP 88542	A2	19830914	EP 1983-300809	19830217
EP 88542	A3	19850515		
EP 88542	B1	19880511		
R: AT, BE, CH, DE, FR, IT, LI, NL, SE				
JP 58154508	A2	19830914	JP 1983-25484	19830217
JP 04045486	B4	19920727		
ZA 8301083	A	19840926	ZA 1983-1083	19830217
CA 1208135	A1	19860722	CA 1983-421827	19830217
AT 34077	E	19880515	AT 1983-300809	19830217

PRIORITY APPLN. INFO.: GB 1982-4958 19820219
EP 1983-300809 19830217

AB Skin prepns. or hair prepns. contg. 0.0001-0.5M **biotin** antagonists such as **biotin** sulfone [40720-05-6], homobiotin [**1784-22-1**], .alpha.-dehydrobiotin [10118-85-1], etc., and carriers are useful for the treatment of seborrhea. The antagonists block

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=> d 8 ibib abs kwic

L4 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1983:50953 CAPLUS
DOCUMENT NUMBER: 98:50953
TITLE: Biotin transport into fully differentiated 3T3-L1 cells
AUTHOR(S): Cohen, Nadine D.; Thomas, Michal
CORPORATE SOURCE: Dep. Biol. Chem., Wright State Univ., Dayton, OH, 45435, USA
SOURCE: Biochemical and Biophysical Research Communications (1982), 108(4), 1508-16
CODEN: BBRCA9; ISSN: 0006-291X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The fully differentiated 3T3-L1 cell, like an adipocyte, contains high levels of the biotin-dependent enzymes pyruvate carboxylase and acetyl CoA carboxylase. Biotin transport into these cells demonstrates many of the characteristics of a carrier-mediated mechanism. The uptake process illustrates a nonlinear dependence on external biotin concn., marked temp. dependence, and considerable substrate specificity, as evidenced by studied with biotin analogs. Perhaps biotin transport into biotin-dependent mammalian cells occurs via a specific membrane carrier.

IT 57-13-6, biological studies 58-85-5 107-92-6, biological studies 109-52-4, biological studies 110-01-0 120-93-4 142-62-1, biological studies 533-48-2 576-19-2 608-16-2 **669-72-7** 940-69-2 **1784-22-1** 10118-85-1 30868-27-0 36846-64-7 53859-20-4 53906-36-8 57828-26-9
RL: BIOL (Biological study)
(transport of, by fibroblast, **biotin** transport in relation to)

=> d 9 ibib abs kwic

L4 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1974:56033 CAPLUS
DOCUMENT NUMBER: 80:56033
TITLE: Relations between antivitamins and Trichomonas vaginalis
AUTHOR(S): Khristov, Khr. P.
CORPORATE SOURCE: Dermatol. Clin. Pleven, Pleven, Bulg.
SOURCE: Scientia Pharmaceutica (1973), 41(3), 200-3
CODEN: SCPHA4; ISSN: 0036-8709
DOCUMENT TYPE: Journal
LANGUAGE: German

AB The **biotin** antagonist streptavidin [9013-20-1] inhibited growth of T. vaginalis in vitro at .geq.1.00 mg/ml, whereas homobiotin [**1784-22-1**] did not inhibit growth. 7-Dehydrocholesteryl bromide [50861-86-4], an antagonist of the growth inhibitor ergostanyl acetate, did not affect growth compared to controls.

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=> d 10 ibib abs kwic

L4 ANSWER 10 OF 11 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1971:66232 BIOSIS
DOCUMENT NUMBER: BR07:66232
TITLE: ISOLATION AND CHARACTERIZATION OF NOR BIOTIN AND TRIS NOR BIOTIN FROM CATABOLISM OF HOMO BIOTIN BY PSEUDOMONAS-SP.
AUTHOR(S): RUIS H; BRADY R N; MCCORMICK D B; WRIGHT L D
SOURCE: MCORMICK, DONALD B. AND LEMUEL D. WRIGHT (EDITED BY). METHODS IN ENZYMOLOGY, VOL. XVIII. VITAMINS AND COENZYMES, PART A. XXI+688P. ILLUS. ACADEMIC PRESS: NEW YORK, N.Y., U.S.A, (1970) 409-413.
FILE SEGMENT: BR; OLD
LANGUAGE: Unavailable
RN **669-72-7** (NOR **BIOTIN**)
1784-22-1 (HOMO **BIOTIN**)
16198-62-2 (TRIS NOR BIOTIN)

=> d 11 ibib abs kwic

L4 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1970:19318 CAPLUS
DOCUMENT NUMBER: 72:19318
TITLE: Characterization of the biotin transport system in Saccharomyces cerevisiae
AUTHOR(S): Rogers, Thomas O.; Lichstein, Herman C.
CORPORATE SOURCE: Coll. of Med., Univ. of Cincinnati, Cincinnati, OH, USA
SOURCE: Journal of Bacteriology (1969), 100(2), 557-64
CODEN: JOBAAY; ISSN: 0021-9193
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The characteristics of the biotin transport mechanism of S. cerevisiae were investigated in nonproliferating cells. Microbiol. and radioisotope assays were employed to measure biotin uptake. The vitamin existed intracellularly in both free and bound forms. Free biotin was extd. by boiling water. Chromatog. of the free ext. showed it to consist entirely of d-biotin. Cellular bound biotin was released by treating cells with 6N H2SO4. The rate of biotin uptake was linear with time for 10 min, reaching a max. at about 20 min followed by a gradual loss of accumulated free vitamin from the cells. Biotin was not degraded or converted to vitamers during uptake. Transport was temp.- and pH-dependent, optimum conditions for uptake being 30.degree. and pH 4.0. Glucose markedly stimulated biotin transport. In its presence, large intracellular free-biotin concn. gradients were established. Iodoacetate inhibited the glucose stimulation of biotin uptake. The rate of vitamin transport increased in a linear fashion with increasing cell mass. The transport system was satd. with increasing concns. of the vitamin. The apparent Km for uptake was 3.23 .times. 10-7M. Uptake of radioactive biotin was inhibited by unlabeled biotin and a no. of analogs including homobiotin, desthiobiotin, oxybiotin, norbiotin, and biotin sulfone. Proline, hydroxyproline, and 7,8-diaminopelargonic acid did not inhibit uptake. Unlabeled biotin and desthiobiotin exchanged with accumulated intracellular 14C-labeled biotin, whereas hydroxyproline did not.
IT 636-20-4 **669-72-7** **1784-22-1** 2921-15-5 10406-89-0
RL: BIOL (Biological study)
(**biotin** absorption by Saccharomyces cerevisiae inhibition by)